Reply to Office Action of August 19, 2009

IN THE CLAIMS

The status of each claim in the present application is listed below.

1. (Original) Isolated and purified pili obtained from Mycobacterium tuberculosis.

2. (Original) The pili of Claim 1, which have a diameter of about 2 to about 7 nm.

3. (Original) The pili of Claim 1, which have a length of at least about 5 to about 10

microns.

4. (Original) The pili of Claim 1, which have been separated from *Mycobacterium*

tuberculosis cells by mechanical shearing, differential centrifugation or isopycnic separation.

5. (Original) The pili of Claim 1, substantially free of cells of Mycobacterium

tuberculosis.

6. (Withdrawn) A method of producing the pili of Claim 1, comprising subjecting

cells of Mycobacterium tuberculosis which produce the pili to mechanical shearing,

differential centrifugation or isopycnic separation and then isolating the pili from the cells.

Claims 7-41: (Canceled)

42. (New) A method of detecting a Mycobacterium tuberculosis infection in a

subject, comprising contacting a body fluid from the subject with the pili of Claim 1 and

assaying for the presence of an antibody to the pili.

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- 43. (New) The method of Claim 42, wherein the subject is a human.
- 44. (New) The method of Claim 42, wherein the body fluid is serum.
- 45. (New) An isolated amino acid sequence which comprises SEQ ID NO: 1, 2, 3 or 5.
- 46. (New) The isolated amino acid sequence of Claim 45, which comprises SEQ ID NO: 1.
- 47. (New) The isolated amino acid sequence of Claim 45, which comprises SEQ ID NO: 2.
- 48. (New) The isolated amino acid sequence of Claim 45, which comprises SEQ ID NO: 3.
- 49. (New) The isolated amino acid sequence of Claim 45, which comprises SEQ ID NO: 5.
- 50. (New) A method of producing the amino acid sequence of Claim 45, comprising transforming a bacterial host cell with a nucleic acid which encodes the amino acid sequence, wherein the host cells produces the amino acid sequence, and collecting the amino acid sequence.

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- 51. (New) The method of Claim 50, wherein the bacterial host cell is E. coli.
- 52. (New) A method of inducing an immune response against *Mycobacterium* tuberculosis, comprising administering an effective amount of the amino acid sequence of Claim 45 to a subject.